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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/748,603

12/29/2003

Richard Doil Lane

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QUALCOMM INCORPORATED
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EXAMINER

NGUYEN, TU X

ART UNIT

PAPER NUMBER

2618

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/748,603	Applicant(s) LANE ET AL.	
	Examiner TU X. NGUYEN	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-19,21-23,25-27,29-32,34,36-41 and 45-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-19,21-23,25-27,29-32,34,36-41 and 45-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/29/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1, 17, 34 and 47 have been considered but are not persuasive.

Applicants argue that Kim paragraphs 0033 only describe a traffic and control channel and not mention anywhere a separate wireless principle for the traffic and control channel, the Examiner disagrees, par.0033 discloses a uni-directional downlink channel carrying the broadcast traffic (CTBCH) corresponds to “the broadcast link is characterized by a first wireless principle”, and a bi-directional channel carrying the control signals (SSCH) corresponds to “control data associated with the multimedia stream over a bidirectional wireless link, wherein the bidirectional wireless link is characterized by a second wireless principle”. The CTBCH and SSCH are separate physical channels corresponds to a first wireless principle and a second wireless principle, respectively. Applicants further argue that Kim paragraph 024 mobile device has only one receiver and therefore two channels having the same wireless principle, the Examiner disagrees, an ordinary skill in the art would appreciate that single receiver can have capability to receive and transmit in common and dedicated channel; however, Akiyama covers Kim's deficiencies by teaching two separate receivers within a device for transmit and receive separate channels.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-11, 13-19, 21-23, 25-27, 29-32, 34, 36-41, 43 and 45-53, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US Pub. 2003/0078061) in view of Akiyama (US Pub. 2002/001386).

Regarding claim 1, Kim discloses a communication system, comprising:

at least a broadcast center wirelessly broadcasting at least one multimedia stream (see abstract, par.034, "broadcasting data" corresponds to "multimedia stream"); and at least one wireless receiver receiving the stream over a wireless broadcast link, wherein the broadcast link is characterized by a first wireless principle; and (see par.0011, 013), a second receiver being provided with control data associated with the multimedia stream over a bidirectional wireless link (see par.0033, "broadcasting traffic" corresponds to "multimedia stream", "bi-directional channel SSCH" corresponds to "bidirectional link), wherein the bidirectional wireless link is characterized by a second wireless principle and wherein the wireless broadcast link and the bidirectional wireless link are separate physical channels (see par.0046-048), wherein services are ordered (par.033) over the bidirectional link and the first and second wireless principles are different from each other.

Kim fails to disclose the first wireless receiver and the second receiver are both part of the same receiving device.

Akiyama disclose the first wireless receiver and the second receiver are both part of the same receiving device (par.019). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kim with the above teaching of Akiyama in order to provide a second receiver to receive broadcast channel.

Regarding claims 3, 22 and 36, the modified Kim discloses the broadcast link is unidirectional (Kim, par.0033) and wherein the first wireless principle is selected from the group consisting of: OFDM principles (Kim, par.0035), CDMA, GSM, WCDMA, TDMA and TD-SCDMA principle.

Regarding claims 4, 23 and 37, the modified Kim discloses **the second wireless principle is selected from the group consisting of a CDMA link, a GSM link (Kim, par.053, GSM network support TDMA), a 802.11 link, a satellite link, and a Bluetooth link.**

Regarding claims 5 and 38, the modified Kim discloses the bidirectional wireless link is a point-to-point wireless communication link (Kim, par.0033).

Regarding claim 6, the modified Kim discloses the first wireless receiver and the second receiver are associated with receiver is a mobile communication device having at least one display for displaying the multimedia data (Kim, par.019).

Regarding claims 7 and 25, the modified Kim discloses the first wireless receiver and the second receiver are associated with at least one speaker for presentation of multimedia audio data (Kim, element 124, fig.4).

Regarding claims 9-10, the modified Kim discloses products are ordered over the bidirectional link (Kim, par.019, “video signal” reads on “product”).

Regarding claims 11, 30, 43 and 48, the modified Kim discloses least one digital broadcast multimedia (DBM) controller useful at least for encrypting, encoding and/or aggregating the multimedia stream (Kim, par.0035-036, 0046, “controller” is inherently included in the system).

Regarding claims 13, 32 and 45, the modified Kim discloses control data includes data useful for indexing into the multimedia stream for channel selection and tracking (Kim, par.0046).

Regarding claim 14, the modified Kim discloses at least one network control center communicating with the DBM controller at least for receiving keys therefrom, the network control center communicating with second receiver over the bidirectional wireless link (Kim, par.0034, 0038).

Regarding claims 15 and 41, the modified Kim discloses at least one NCC controller associated with the network control center at least for providing to receivers applications related to playing multimedia streams (Kim, par.0035).

Regarding claim 16, the modified Kim discloses at least one network operations controller (NOC) associated with the broadcast network operations center at least for providing to receivers applications related to playing multimedia streams through a bidirectional wireless link (Kim, par.0035, 0037-0038).

Regarding claims 17, 34 and 47, Kim discloses a method for providing a multimedia stream to a wireless communication device, comprising: broadcasting, the multimedia stream

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over a wireless broadcast link to a first receiver, wherein the broadcast link is characterized by a first wireless principle; and transmitting, over a bidirectional wireless link to a second receiver, control data necessary for displaying the multimedia, stream on the device, wherein the bidirectional wireless link is characterized, by a second wireless principle, and wherein the wireless broadcast link and the bidirectional wireless link are separate physical channels (par.011-013, 046-048).

Kim fails to disclose the first wireless receiver and the second receiver are both part of the same receiving device.

Akiyama disclose the first wireless receiver and the second receiver are both part of the same receiving device (par.019). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kim with the above teaching of Akiyama in order to provide a second receiver to receive broadcast channel.

Regarding claims 18-19, the modified Kim discloses at least some control data is transmitted/received to the wireless device (Kim, par.033).

Regarding claim 21, the modified Kim discloses the broadcast link is unidirectional (Kim par.033).

Regarding claims 26, 39 and 40, the modified Kim discloses the control data includes at least one of: at least one key useful in decrypting the multimedia stream (Kim, par.0042), data associated with a subscription to a multimedia broadcast service (Kim, par.0037), data associated with a registration on a multimedia broadcast network, at least one application useful in decoding the multimedia data, billing information, data related to user preferences, and data related to levels of service related to providing the multimedia stream.

Regarding claim 27, the modified Kim discloses the control data includes data associated with a subscription to a multimedia broadcast service (Kim par.0035).

Regarding claim 29, the modified Kim discloses the control data includes data related to levels of service related to providing the multimedia stream (Kim par.009).

Regarding claim 46, the modified Kim discloses at least one of services, and products, can be ordered over the bidirectional link (Kim, par.033, protocol agreement).

Regarding claims 51-53, the modified Kim to discloses control data associated with at least one key useful in decrypting the multimedia stream (see abstract), application useful in decoding the multimedia data (see par.044). However, Kim fails to includes billing information, data related to user preferences, data associated with a registration on a multimedia broadcast network, and data related to levels of service related to providing the multimedia stream. The examiner takes an official notice the concept that the control signal provides one of variety information are well know in the art, it would have obvious the control signals which provide useful information to the user whereat the information may be billing information, level of services, etc.

Claims 12, 31 and 44, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Akiyama and further in view of McClellan (US Pub. 2004/008794).

Regarding claims 12, 31 and 44, Kim discloses decompressing (Kim, par.007) and decoding (Akiyama, par.0121). However Kim fails to disclose de-interleaving the multimedia stream.

McClellan discloses de-interleaving and decoding the multimedia stream (see par.0052, 0054). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kim with the above teaching of the McClellan in order to provide advantage for the processing modules may operate at a lower speed, or may operate at the highest speed possible and operate in parallel to achieve higher overall transceiver operation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Tu X Nguyen/

Primary Examiner, Art Unit 2618

11/30/09